

Specimens approaching this variety have been seen from COLORADO: on dry sandy ground at 8,000 feet, Parlin, Gunnison County, August 12-20, 1901, *B. H. Smith* (A). WASHINGTON: Philleo Lake, Spokane County, August 14, 1889, *W. N. Suksdorf*, no. 943 in part (A. & M).

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EXPLANATION OF PLATE 113.

Rumex maritimus L. drawn from Flora Exsiccata Austro-Hungarica no. 1,013, Austria inferior, in paludosis ad Maria-Lanzendorf in agro Vindobonensi, 180 mt. s. m. *Heimerl*.

Fig. 1. Mature fruit, $\times 10$.

Fig. 2. Median cauline leaf, $\times 1$.

Rumex maritimus var. *fueginus* (Phil.) Dusén drawn from *Fernald, Long, and St. John*, no. 7,339, wet brackish sand or mud at the margin of a pond southwest of Étang du Nord village, Grindstone Island, Magdalen Islands, Quebec, August 15, 1912.

Fig. 3. Median cauline leaf, $\times 1$.

Fig. 4. Mature fruit, $\times 10$.

Rumex persicarioides L. drawn from *Fernald, Long, and St. John*, no. 7,340, border of salt marsh, Bunbury, Prince Edward Island, August 28, 1912.

Fig. 5. Median cauline leaf, $\times 1$.

Fig. 6. Mature fruit, $\times 10$.

AN ATRIPLEX NEW TO NORTH AMERICA.

S. F. BLAKE.

WHILE collecting during the late summer of 1913 on Miscou Island off the northeast coast of New Brunswick, the writer met with an *Atriplex* among the seashore sands whose appearance at once struck him as peculiar. The plants, which grew singly or in groups of three or four, never in colonies as the members of the *A. patula* complex so commonly do, were at once distinguishable from that species by their strongly prostrate habit, whitish stems, and dense grayish-white mealiness. Later in the summer a few plants of the same species were found on the shore of Fox Island, one of a chain of low sandy islets in Miramichi Bay. Subsequent herbarium study of the species, which was collected on Prince Edward Island so long ago as 1888 by John Macoun, and in 1912 in some abundance on the Magdalen Islands by Prof. Fernald and his companions, has shown it to be identical with the west European plant which, when not confused

with *A. laciniata* L., has generally passed as *A. arenaria* Woods, and has recently been treated as *A. sabulosa* Rouy by Moss & Wilmott¹ in their important revision of British Atriplices.

Although the diagnostic characters of this species are quite distinctive and make it unique among indigenous North American forms, the determination of the name by which it should be known is a matter of some difficulty. It apparently formed a part of the original *Atriplex laciniata* L.,² and was referred to by Linnaeus in the *Flora Anglica*³ as *A. maritima*, a name discarded by Moss & Wilmott as a *lapsus calami*. Woods⁴ in 1849 published the plant as a new species under the name *A. arenaria*, replaced by Rouy⁵ in 1890 by *A. sabulosa* on account of the prior use of the name *A. arenaria* by Nuttall⁶ for a related species of our eastern American coast. The name *Atriplex maritimum* had in the meantime been independently given to the species by Ernst Hallier in a revision of the Atriplices of Heligoland. According to International Rules, Hallier's name should be used for the plant in view of the fact that the three previous uses of this binomial are untenable.⁷

In the *Index Kewensis* Rafinesque's *Atriplex mucronata*⁸ is referred to *A. arenaria* Nutt. If this were correct the name would require adoption for the latter species, and Woods's *A. arenaria* would then be available for the present plant. But the method of publication of *A. mucronata* does not seem to the writer to justify its adoption, although a specimen of *A. arenaria* Nutt. from "maritime New York" in the *Prodromus Herbarium*, labeled *A. mucronata* by Rafinesque himself, shows that the name was intended by him to apply to that species. It was merely mentioned incidentally by Rafinesque in a review of Pursh's *Flora*: "His *Atriplex halimus*, *A. laciniata*, *A. hastata*, are different from the European species and have been called *A. halimoides*, *A. mucronata*, and *A. dioica* by Rafinesque." Names so

¹ Moss & Wilmott in Moss, *Cambr. Brit. Fl.* ii. 179. t. 185 (1914), q. v. for full synonymy.

² Linn. *Sp.* ii. 1053 (1753).

³ Linn. *Fl. Angl.* 25 (1754).

⁴ Woods, *Phytol.* iii. 593 (1849).

⁵ Rouy, *Bull. Soc. Bot. Fr.* xxxvii. p. xx (1890).

⁶ Nutt. *Gen.* i. 198 (1818).

⁷ *A. maritima* L. l. c. is considered by Moss & Wilmott to have been adopted by Linnaeus from Ray through a lapsus, an interpretation which seems justified by the fact that the name was never afterwards used by Linnaeus; *A. maritima* (L.) Crantz, *Inst.* i. 208 (1766) is *Suaeda maritima* (L.) Dumort.; *A. maritima* Pall. *Reise* ii. 289 (1773) is a mere nomen.

⁸ Raf. *Am. Month. Mag.* 176 (Jan. 1818).

published, if tenable at all, are only so through reference to a previously published description; but the description of *A. laciniata* by Pursh,¹ copied by him from Willdenow,² is quite inapplicable to *A. arenaria* Nutt., although the range allotted to the plant by Pursh indicates that species. Pursh's description runs thus: "A. caule erecto herbaceo, foliis triangularibus profunde dentatis subtus albidis, calycibus fructus rhombeis trinerviis denticulatis." The plant to which this character applies is the true *A. laciniata* L., not known in America, although a near relative, *A. rosea* L., occurs as a rare ballast plant within the range assigned by Pursh. *Atriplex laciniata* L. was based by Linnaeus on several references, of which the only American is from Gronovius's *Flora Virginica*. The Clayton plant on which Gronovius's reference is based is apparently no longer in existence, neither Mr. A. J. Wilmott nor the writer having been able to discover it in a search through all the material of *Atriplex* in the British Museum. In any case Rafinesque's name cannot be adopted for *A. arenaria* Nutt., having been based on a published description whose characters disagree with those of that species in nearly every point.

Atriplex maritima is an interesting addition to the gradually increasing number of coastal and maritime species mainly of west European range which occur also on the northeast coast of North America. It may be identified by the following description.

ATRIPLEX MARITIMA E. Hallier, Bot. Zeit. xxi. Beilag [1] 10 (1863), as *A. maritimum*, not Crantz nor Pall.; *A. arenaria* Woods, not Nutt.;

A. sabulosa Rouy. Prostrate annual, branched from the base, the branches sometimes 0.6 m. long; stem whitish, slightly grooved, lepidote-farinose, at length subglabrate; branches and branchlets subopposite below, alternate above; leaves rhomboid-ovate, obtuse or subacute, mucronate, irregularly crenate-dentate above the cuneate base with about 6–10 triangular obtuse teeth, the lowest pair generally larger,

permanently whitish-lepidote-farinose both sides, more densely so beneath, 1.5–3 cm. long, 1–1.9 cm. wide, on unmarginated whitish petioles 2–4 mm. long; flowers in clusters of 1–6 in the axils of nearly all the leaves, not forming spikes; fruiting calyx rhombic, broadly cuneate at base and apex, broadest at the middle, there with 1–3 low

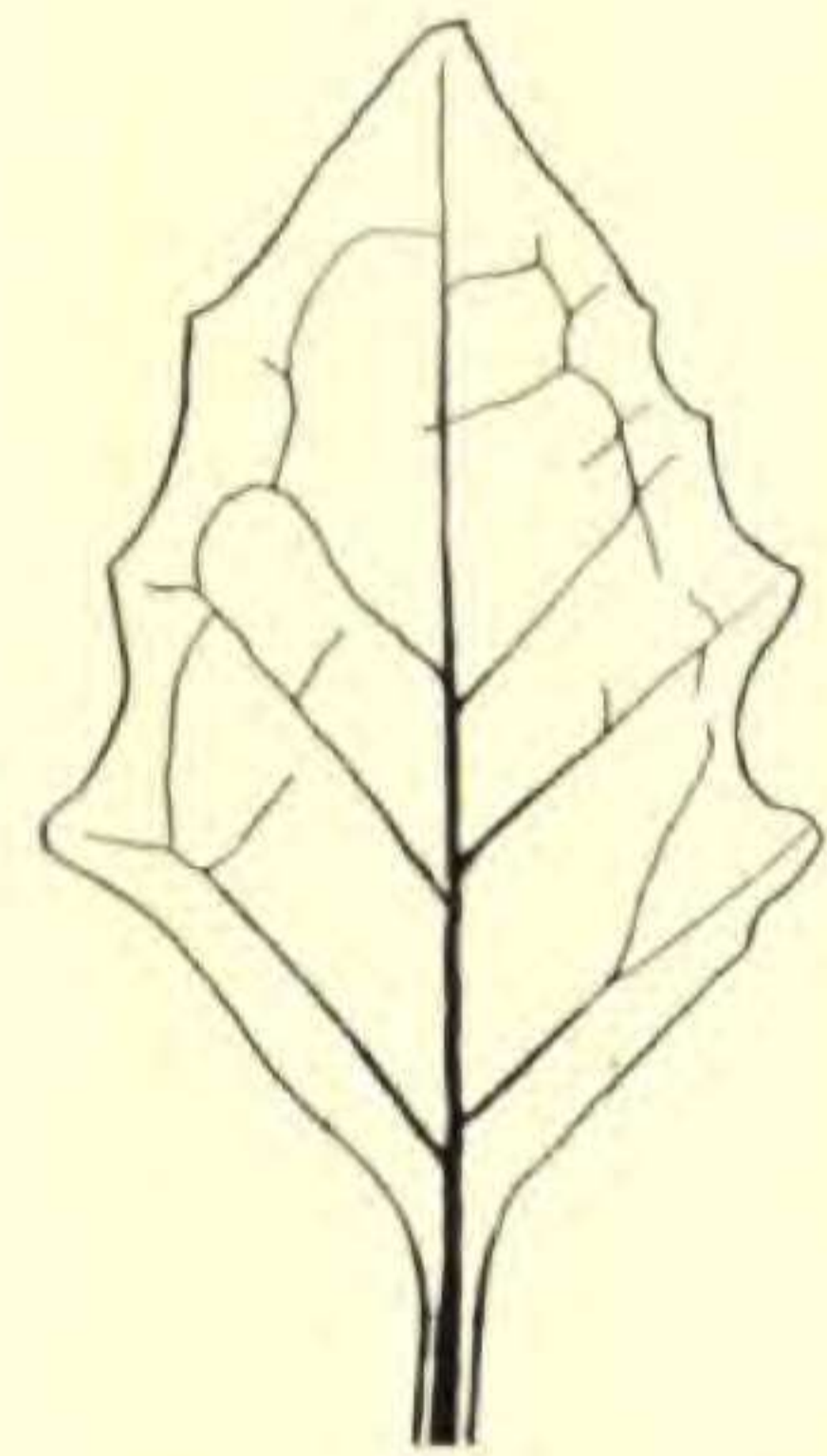


Fig. 1. *Atriplex maritima*. Leaf $\times 1$.



Fig. 2. *Atriplex maritima*. Fruiting bract $\times 1$.

¹ Pursh, Fl. i. 199 (1814).

² Willd. Sp. iv. 963 (1806).

triangular teeth on each side, 3-nerved and strongly reticulate, often with a few conical appendages on the back, whitish and coriaceous at base when fully ripe, membranous-herbaceous above, distinctly whitish-lepidote-farinose, 6–9 mm. long, 6.5–8 mm. wide, occasionally with a short distinct pedicel.—NEW BRUNSWICK: sandy beach, Miscou Harbor, Miscou Island, Gloucester County, 27 Aug. 1913, *Blake* 5565 (Gray Herb.); beach, Fox Island, Miramichi Bay, Northumberland County, 18 Sept. 1913, *Blake* 5692 (Gray Herb.). PRINCE EDWARD ISLAND: Brackley Point, 6 Aug. 1888, *J. Macoun* (Brit. Mus.). QUEBEC: damp brackish sandy beach, Grande Entrée, Coffin Island, Magdalen Islands, 20 July and 19 Aug. 1912, *Fernald, Bartram, Long & St. John*, nos. 7395, 7398 (Gray Herb.); dry sandy beach southwest of Étang du Nord wharf, Grindstone Island, Magdalen Islands, 25 July and 15 Aug. 1912, *Fernald, Bartram, Long & St. John*, nos. 7396, 7397 (Gray Herb.).

LONDON, ENGLAND.

THE 20TH ANNUAL WINTER MEETING OF THE VERMONT BOTANICAL CLUB was held conjointly with the Vermont Bird Club at Burlington, January 29 and 30, 1915, with a good attendance. The sessions were held in the Williams Science Hall, University of Vermont.

Twelve botanical papers were read and discussed. The Vermont blackberries received attention in a talk by Dr. Ezra Brainerd of Middlebury on "New Stations in Vermont for Rare Forms of *Rubus*," and in a paper by Mr. A. K. Peitersen of the University of Vermont on "Some Problems in the Study of Vermont Blackberries."

Prof. George P. Burns of the University of Vermont told about "The Publication of the New Edition of the Vermont Flora" which is now in the printer's hands.

There were papers on "Plant Quarantine Laws," and "Susceptibility of Cruciferae to Club Root," by Prof. B. F. Lutman and Mr. G. A. Cunningham respectively, both of the University of Vermont, and one on the "Forest Fungi of Bethel," by Dr. Perley Spaulding of the U. S. Department of Agriculture.

The two clubs expect to unite at the next annual meeting and the officers elected this year were the same for both clubs; viz. Pres., Dr. Ezra Brainerd, Middlebury; Vice-Pres., Dr. Henry F. Perkins, Burlington; Sec., Prof. George P. Burns, Burlington; Treas., Mrs. Nellie F. Flynn, Burlington; Editor, Mr. George L. Kirk, Rutland; Librarian, Miss Phoebe M. Towle, Burlington.—NELLIE F. FLYNN, Burlington, Vermont.